

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/573,821 A  
Source: IFVO  
Date Processed by STIC: 8/22/06

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 08/22/2006

PATENT APPLICATION: US/10/573,821A

TIME: 10:43:06

Input Set : A:\47259501.APP

Output Set: N:\CRF4\08222006\J573821A.raw

```

3 <110> APPLICANT: OKUNO, KAZUAKI
4   YABUTA, MASAYUKI
6 <120> TITLE OF INVENTION: POLYPEPTIDE CLEAVAGE METHOD USING OMPT PROTEASE VARIANT
8 <130> FILE REFERENCE: 47259.5001/00US
10 <140> CURRENT APPLICATION NUMBER: 10/573,821A
11 <141> CURRENT FILING DATE: 2006-03-28
13 <150> PRIOR APPLICATION NUMBER: PCT/JP04/014704
14 <151> PRIOR FILING DATE: 2004-09-29
16 <150> PRIOR APPLICATION NUMBER: JP 2003-342183
17 <151> PRIOR FILING DATE: 2003-09-30
19 <160> NUMBER OF SEQ ID NOS: 38
21 <170> SOFTWARE: PatentIn Ver. 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 184
25 <212> TYPE: PRT
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
30   protein sequence
32 <400> SEQUENCE: 1
33 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
34   1           5           10           15
36 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
37           20           25           30
39 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
40           35           40           45
42 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
43           50           55           60
45 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
46   65           70           75           80
48 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
49           85           90           95
51 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
52           100          105          110
54 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
55           115          120          125
57 Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Arg His His Gly
58   130          135          140
60 Ser Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
61 145          150          155          160
63 Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile
64           165          170          175
66 Ala Trp Leu Val Lys Gly Arg Gly

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/573,821A

DATE: 08/22/2006

TIME: 10:43:06

Input Set : A:\47259501.APP

Output Set: N:\CRF4\08222006\J573821A.raw

```

67          180
70 <210> SEQ ID NO: 2
71 <211> LENGTH: 184
72 <212> TYPE: PRT
73 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
77     protein sequence
79 <400> SEQUENCE: 2
80 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
81   1          5          10          15
83 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
84          20          25          30
86 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
87          35          40          45
89 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
90          50          55          60
92 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
93   65          70          75          80
95 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
96          85          90          95
98 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
99          100          105          110
101 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
102          115          120          125
104 Met His Ala Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Ala Ala Ala
105          130          135          140
107 Ala Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
108 145          150          155          160
110 Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile
111          165          170          175
113 Ala Trp Leu Val Lys Gly Arg Gly
114          180
117 <210> SEQ ID NO: 3
118 <211> LENGTH: 184
119 <212> TYPE: PRT
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
124     protein sequence
126 <400> SEQUENCE: 3
127 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
128   1          5          10          15
130 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
131          20          25          30
133 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
134          35          40          45
136 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
137          50          55          60

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/573,821A

DATE: 08/22/2006

TIME: 10:43:06

Input Set : A:\47259501.APP

Output Set: N:\CRF4\08222006\J573821A.raw

```

139 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
140 65 70 75 80
142 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
143 85 90 95
145 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
146 100 105 110
148 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
149 115 120 125
151 Met His Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Ala Arg Ala
152 130 135 140
154 Ala Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
155 145 150 155 160
157 Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile
158 165 170 175
160 Ala Trp Leu Val Lys Gly Arg Gly
161 180
164 <210> SEQ ID NO: 4
165 <211> LENGTH: 184
166 <212> TYPE: PRT
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
171 protein sequence
173 <400> SEQUENCE: 4
174 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
175 1 5 10 15
177 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
178 20 25 30
180 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
181 35 40 45
183 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
184 50 55 60
186 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
187 65 70 75 80
189 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
190 85 90 95
192 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
193 100 105 110
195 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
196 115 120 125
198 Met His Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Arg Ala Arg Ala
199 130 135 140
201 Ala Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
202 145 150 155 160
204 Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile
205 165 170 175
207 Ala Trp Leu Val Lys Gly Arg Gly
208 180
211 <210> SEQ ID NO: 5

```

## RAW SEQUENCE LISTING

DATE: 08/22/2006

PATENT APPLICATION: US/10/573,821A

TIME: 10:43:06

Input Set : A:\47259501.APP

Output Set: N:\CRF4\08222006\J573821A.raw

```

212 <211> LENGTH: 162
213 <212> TYPE: PRT
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
218     protein sequence
220 <400> SEQUENCE: 5
221 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
222   1           5           10           15
224 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
225           20           25           30
227 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
228           35           40           45
230 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
231           50           55           60
233 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
234   65           70           75           80
236 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
237           85           90           95
239 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
240           100          105          110
242 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
243           115          120          125
245 Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Phe Val Pro Ile
246           130          135          140
248 Phe Thr Tyr Gly Glu Leu Gln Arg Met Gln Glu Lys Glu Arg Asn Lys
249 145          150          155          160
251 Gly Gln
255 <210> SEQ ID NO: 6
256 <211> LENGTH: 165
257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
262     protein sequence
264 <400> SEQUENCE: 6
265 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
266   1           5           10           15
268 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
269           20           25           30
271 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
272           35           40           45
274 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
275           50           55           60
277 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
278   65           70           75           80
280 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
281           85           90           95
283 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro

```

## RAW SEQUENCE LISTING

DATE: 08/22/2006

PATENT APPLICATION: US/10/573,821A

TIME: 10:43:06

Input Set : A:\47259501.APP

Output Set: N:\CRF4\08222006\J573821A.raw

```

284          100          105          110
286 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
287          115          120          125
289 Met His Ala Ala Ala Ala Ala Ala Ala Arg Arg Arg Ala Arg Phe
290          130          135          140
292 Val Pro Ile Phe Thr Tyr Gly Glu Leu Gln Arg Met Gln Glu Lys Glu
293 145          150          155          160
295 Arg Asn Lys Gly Gln
296          165
299 <210> SEQ ID NO: 7
300 <211> LENGTH: 167
301 <212> TYPE: PRT
302 <213> ORGANISM: Artificial Sequence
304 <220> FEATURE:
305 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
306     protein sequence
308 <400> SEQUENCE: 7
309 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
310  1          5          10          15
312 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro
313          20          25          30
315 Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
316          35          40          45
318 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
319          50          55          60
321 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
322 65          70          75          80
324 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
325          85          90          95
327 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
328          100          105          110
330 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
331          115          120          125
333 Met His Ala Ala Ala Ala Ala Ala Ala Arg Arg Arg Ala Arg Ser
334          130          135          140
336 Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val Gly Lys Lys Arg
337 145          150          155          160
339 Arg Pro Val Lys Val Tyr Pro
340          165
343 <210> SEQ ID NO: 8
344 <211> LENGTH: 176
345 <212> TYPE: PRT
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
350     protein sequence
352 <400> SEQUENCE: 8
353 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys Asp
354  1          5          10          15

```

**VERIFICATION SUMMARY**

DATE: 08/22/2006

PATENT APPLICATION: US/10/573,821A

TIME: 10:43:07

Input Set : A:\47259501.APP

Output Set: N:\CRF4\08222006\J573821A.raw